

16179 U.S. PTO

PTO/SB/05 (07-03)

Approved for use through 07/31/2003. OMB 0651-0032

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UTILITY  
PATENT APPLICATION  
TRANSMITTAL

(Only for new non provisional applications under 37 CFR 1. 53(b))

Attorney Docket No.

W-9570-01

First Inventor

Ruizhong Hu

Title

Gasoline Sulfur Reduction Catalyst for Fluid Catalytic Cracking Process

Express Mail Label No.

EV 311099018 US

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 51]  
(preferred arrangement set forth below)
- Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 8]
5. Oath or Declaration [Total Pages     ]
- a. ☐ Newly executed (original or copy)
- b. ☐ Copy from a prior application (37 CFR 1.63 (d))  
(for continuation i divisional with Box 18 completed)
1. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s)  
named in the prior application, see 37 CFR  
1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

## ADDRESS TO:

Mail Stop Patent Application  
Commissioner for Patents  
Alexandria VA 22313-1450

7. ☐ CD-ROM or CD-R in duplicate, large table or  
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if  
applicable, all necessary)
- a. ☐ Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (2 copies); or
- ii. ☐ paper
- C. ☐ Statements verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of  
(when there is an assignee) Attorney
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure ☐ Copies of IDS  
Statement (IDS USPTO-1449) Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Non publication request under 35 U.S.C. 122  
(b)(2)(13)(i). Applicant must attach form  
PTO/SB/35 or its equivalent
17. ☒ Other: Express Mail Certificate

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76.-

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP)of prior application No.:      /     

Prior application information:

Examiner:     Group Art Unit,     

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS



Customer Number or Bar Code Label

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or ☐

Correspondence address below

Insert Customer No or Attach Bar Code Label here

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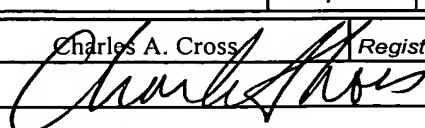
Name (Print I Type)

Charles A. Cross

Registration No. (Attorney/Agent)

32406

Signature



Date

03/16/2004

Toolawnator Inc.

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**FEE TRANSMITTAL**  
**for FY 2004**

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

\$1,774.00

**Complete If Known**

Application Number	
Filing Date	March 16, 2004
First Named Inventor	Ruizhong Hu
Examiner Name	
Art Unit	
Attorney Docket No.	W-9570-01

**METHOD OF PAYMENT (check all that apply)**
☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None
☒ Deposit Account:Deposit Account Number  
Deposit Account Name

07-1770

W.R.Grace &amp; Co.-Conn - MD

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments  
☒ Charge any additional fee(s) during the pendency of this application  
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.
**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee \$	Fee Code	Fee \$		
1001	770	2001		Utility filing fee	
1002		2002		Design filing fee	
1003		2003		Plant filing fee	
1004		2004		Reissue filing fee	
1005		2005		Provisional filing fee	
<b>SUBTOTAL (1)</b>					<b>\$0.00</b>

**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

					Extra Claims		Fee from below		Fee Paid
Total Claims		-		=	0	X	0	=	0
Independent Claims		-		=	0	X		=	0
Multiple Dependent									0
Large Entity	Small Entity								
Fee Code	Fee \$	Fee Code	Fee \$		<u>Fee Description</u>				
1202		2202			<input type="checkbox"/>	Claims in excess of 20			
1201		2201			<input type="checkbox"/>	Independent claims in excess of 3			
1203		2203				Multiple dependent claim, if not paid			
1204		2204			<input type="checkbox"/>	** Reissue independent claims over original patent			
1205		2205			<input type="checkbox"/>	** Reissue claims in excess of 20 and over original patent			

\* \*or number previously paid, if greater: For Reissues, see above

Or\* ☒ Total Filing and Extra Claim Fees As Filed **\$1,774.00**  
☐ Total Extra Claim Fees As Amended From Page 2 Parts 1 or 2
SUBMITTED BY: *Charles A. Cross* \*This Fee is In Lieu Of Parts 1 and 2 above**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code (\$)	Fee Code** (\$)	Fee Description	Fee Paid
1051	2051	Surcharge - late filing fee or oath	
1052	2052	Surcharge - late provisional filing fee or cover sheet	
1053	1053	Non-English specification	
1812	1812	For filing a request for ex parte reexamination	
1804*	1804*	Requesting publication of SIR prior to Examiner action	
1805*	1805*	Requesting publication of SIR after Examiner action	
1251	2251	Extension for reply within first month	0
1252	2252	Extension for reply within second month	0
1253	2253	Extension for reply within third month	0
1254	2254	Extension for reply within fourth month	0
1255	2255	Extension for reply within fifth month	0
1401	2401	Notice of Appeal	
1402	2402	Filing a brief in support of an appeal	
1403	2403	Request for oral hearing	
1451	1451	Petition to institute a public use Proceeding	
1452	2452	Petition to revive - unavoidable	
1453	2453	Petition to revive - unintentional	
1501	2501	Utility issue fee (or reissue)	
1502	2502	Design issue fee	
1503	2503	Plant issue fee	
1460	1460	Petitions to the Commissioner	
1807	1807	Processing fee under 37 CFR 1.17(q)	
1806	1806	Submission of Information Disclosure Stmt	
8021	8021	Recording each patent assignment per property (times number of properties)	
1809	2809	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	2810	For each additional invention to be examined (37 CFR 1.129(b))	
1801	2801	Request for Continued Examination (RCE)	
1802	1802	Request for expedited examination of a design application	

Other fee (specify)

\* Reduced by Basic Filing Fee Paid

\*\*Use Large Entity Fee Where No Form Fill Field Exists

**SUBTOTAL (3)****\$0.00**

(Complete (if applicable))

Name (Print Type)	Charles A. Cross	Registration No. (Attorney/Agent)	32406	Telephone	410-531-4518
Signature	<i>Charles A. Cross</i>	Date	March 16, 2004		

Toolawntor Inc.

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☒ "EXPRESS MAIL" - Mailing Label No. EV 311099018 US

**Date of Deposit: March 16, 2004**

I hereby certify that the enclosed documents, Utility Patent Application Transmittal; Fee Transmittal (in duplicate); Specification (51 pages); Drawings (8 pages) and this Certificate of Express Mailing are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Linda L. Burton

(Typed or printed name of person mailing  
mailing paper or fee)

A handwritten signature in cursive script, appearing to read "Linda L. Burton", written over a horizontal line.

(Signature of person)

Attorney Docket No: W9570-01